

1. (Twice Amended) A radio frequency ("RF") power amplifier with high output efficiency operating in a switched mode at a predetermined frequency band, said amplifier comprising:

a semiconductor device having a control terminal and two conducting terminals, said semiconductor device capable of a conductive state and a nonconductive state, wherein said control terminal controls the conductance across said two conducting terminals, wherein a first of said two conducting terminals is tied to ground potential, wherein a second of said two conducting terminals comprises the output of said amplifier;

a RF source coupled to said control terminal of said semiconductor device; and

a subharmonic filter coupled to said second of said two conducting terminals, the subharmonic filter having a passband that passes subharmonic frequencies of said predetermined frequency band at said second of said conducting terminals to a termination circuit to reduce said subharmonic frequencies of said predetermined frequency band.

15. (Twice Amended) The RF amplifier of claim 14 wherein said low frequency termination circuit provides controlled impedance around said predetermined frequency band.

21. (Twice Amended) A radio frequency ("RF") power amplifier with high output efficiency operating in a switched mode at a predetermined frequency band, said amplifier comprising:

a discrete transistor having a gate terminal, a source terminal, and a drain terminal, said drain terminal in a grounded configuration, said source terminal comprising the output of said amplifier;

a RF source coupled to said gate terminal of said discrete transistor;

a resonant inductor circuit coupled to said source terminal for eliminating the capacitance between said drain terminal and said source terminal when said discrete transistor is in an off state;

a subharmonic filter coupled between said source terminal and ground, the subharmonic filter including a low pass filter having a cutoff frequency to pass subharmonic frequencies of said predetermined frequency band at said source terminal to a termination circuit of said subharmonic filter to reduce said subharmonic frequencies of said predetermined frequency band; and

a low frequency termination circuit coupled to said source terminal through said resonant inductor circuit.

32. (Thrice Amended) The RF power amplifier of claim 21 wherein said low frequency termination circuit includes a low pass filter having a passband that passes spurious low frequency signals.

33. (Twice Amended) The RF amplifier of claim 32 wherein said low frequency termination circuit provides controlled impedance around said predetermined frequency band.

34. (Twice Amended) A radio frequency ("RF") power amplifier with high output efficiency operating in a switched mode at a predetermined frequency band, said amplifier comprising:

a discrete transistor having a gate terminal, a source terminal, and a drain terminal, said source terminal in a grounded configuration, said drain terminal comprising the output of said amplifier;

a RF source coupled to said gate terminal of said discrete transistor; and

a subharmonic filter coupled to said drain terminal and ground, the subharmonic filter having a passband that passes subharmonic frequencies of said predetermined frequency band at said drain terminal to a termination circuit to reduce said subharmonic frequencies of said predetermined frequency band.

46. (Twice Amended) The RF amplifier of claim 45 wherein said low frequency termination circuit provides controlled impedance around said predetermined frequency band.

56. (Amended) The RF amplifier of claim 14 wherein said low frequency termination circuit includes a low pass filter having a passband that passes spurious low frequency signals.

57. (Amended) The RF amplifier of claim 45 wherein said low frequency termination circuit includes a low pass filter having a passband that passes spurious low frequency signals.

---

Please cancel claim 50 without prejudice.